TESTIMONY OF
THOMAS E. WHEELER
PRESIDENT AND CEO
CELLULAR TELECOMMUNICATIONS
INDUSTRY ASSOCIATION

BEFORE THE

SENATE COMMERCE COMMITTEE
SUBCOMMITTEE ON COMMUNICATIONS

MAY 12, 1999

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to appear before you today to present the wireless industry's views on legislation to promote and enhance public safety through the use of emergency 9-1-1 service. I am Thomas E. Wheeler, President and CEO of the Cellular Telecommunications Industry Association (CTIA) representing commercial wireless telecommunications carriers, including cellular and personal communications services (PCS) and their suppliers and vendors.[1] The wireless industry is founded on innovation, competition and safety. Today, my testimony will focus on safety and discuss how Congress can be instrumental in delivering unprecedented safety benefits to consumers across America.

---

[1] CTIA is the international organization which represents the Commercial Mobile Radio Service (CMRS) industry, including cellular, personal communications services, wireless data. CTIA has over 750 total members including domestic and international carriers, and manufacturers of wireless telecommunications equipment. CTIA's members provide services in all 734 cellular markets in the United States and personal communications services in all 50 major trading areas, which together cover 95% of the U.S. population.

Wireless is the Greatest Safety Tool Since the Development of 9-1-1

S. 800 is the cornerstone of our industry's efforts, in cooperation with many others, to enhance wireless public safety capabilities and in the process save lives. We are proud that the commercial success of wireless communication is linked to an enormous public safety benefit: nearly 100,000 emergency wireless calls a day, delivered without charge by our members.

Year	Wireless Subscribers	U.S. 911 Annually	U.S. 911 Monthly	U.S. 911 Daily
1985	340,213	193,333	16,111	530
1995	33,785,661	20,059,894	1,671,658	54,959
1998	69,209,321	35,805,405	2,942,910	98,097

There are now nearly 74 million “safety sentinels” in the United States – 74 million subscribers who speed the delivery of safety services by providing rapid reports of car crashes, aggressive and impaired driving, serious crimes, and other threats to our communities. There are literally thousands of Americans who credit their wireless phone with aiding a fellow citizen, preventing a crime or in the ultimate form of public safety expression, saving a life -- it is a distinction that the wireless industry is proud of and inspired by. CTIA will continue to work diligently to press for legislation that improves the safety role of wireless telecommunications.

Just in the last few days we have been reminded of the incredible safety value of wireless communications. In Georgia, a young mother and her infant daughter were abducted by carjackers while on a shopping trip. Thanks to the incredible courage of a young lady, an alert 9-1-1 dispatcher and a wireless phone, the carjackers were apprehended and Esther Green and her

10-month-old daughter were released unharmed. Last week in rural Utah, Dr. Ron Clark, his two sons and 12 other snowboarders were swept up in an avalanche, buried in the snow. Dr. Clark was able use his wireless phone to call for help. In Oklahoma, immediately following the deadly tornadoes, a wireless phone was used by a family trapped in a cellar to call for help. These are not isolated cases -- every single day in America, wireless phones are used to increase public safety.

Highway crashes are the leading cause of death for Americans between the ages of 1 and 44. Crashes are the fourth leading cause of death overall. Each year, nearly 42,000 Americans die in automobile crashes and 5.2 million people are injured in crashes. The Department of Transportation estimates the societal and property cost of crash injuries and deaths at $150 billion per year. Emergency medical professionals talk about “golden minutes” and the “golden hour” because getting proper care to crash, heart attack, or other victims quickly often means the difference between life and death. Reducing response time by mere minutes could save thousands of lives in the U.S. each year. S. 800 will aid in speeding assistance to those in need.

Chairman Burns, upon introduction of the Wireless 9-1-1 bill you stated:

> "The National Highway Traffic Safety Administration has conducted studies showing that crash-to-care time for fatal accidents is about a half hour in urban areas. In rural areas, which covers most my home state of Montana, that crash-to-care time almost doubles. On average, it takes just shy of an hour to get emergency attention to crash victims in rural areas. Almost half of the serious crash victims who do not receive care in the first hour die at the scene of the accident. That's a scary statistic."

Response time is critical in rural areas and the industry is continually searching for technologies to

reduce the time it takes for emergency personnel to arrive at the scene of an accident. Coupling several technologies with wireless communications can lead to incredible public safety benefits. Technology improvements affecting public safety, such as automatic crash notification (ACN), need to be encouraged by the Administration and members of this committee.

In the last two years, we have expanded our safety efforts considerably by working with and learning from 9-1-1 directors, Emergency Medical Services experts, the American Automobile Association (AAA), the National Emergency Numbers Association (NENA), the Associated Public Safety Communications Officials (APCO), and many others on how to better serve the public. Last year, CTIA joined with state and local public safety officials, emergency and trauma care physicians, emergency nurses, other medical professionals, and health care groups like the Brain Injury Association and the American Burn Association to form the ComCARE Alliance – which stands for "Communications for Coordinated Assistance and Response to Emergencies" – a coalition with which many of you are familiar. We continue to work with these organizations to provide a system that reduces response times to emergencies, lessens the severity of injuries and saves lives. Together, with ComCARE, we support this legislation, and together we are working to deploy these advanced technologies in the states.

There are several immediate issues we must address to provide enhancement of 9-1-1 services. The safety agenda includes:

- Universal 9-1-1 number
- Encourage FCC leadership in support of state emergency service planning
- Limitation of liability
- Technologies that improve wireless emergency services

- Advancement towards a seamless, ubiquitous system

Designation of a Universal 9-1-1 Number

The first requirement in achieving the safety goals of the wireless industry is the designation of the number 9-1-1 as a uniform and universal telephone number within the United States for reporting an emergency, whether on wireless or wireline telephones. The same designation also would be required by any numbering agency or entity to which the FCC has delegated authority under section 251(e) of the *Communications Act of 1934*.

Wireless telecommunications is mobile and therefore no one consumer can be expected to know the approximately 20 different emergency wireless numbers across the United States. The lack of a uniform wireless emergency dialing code creates unnecessary confusion and impairs the ability of mobile customers to request emergency assistance quickly and easily. Even along an interstate highway within one state, a mobile customer may be required to know and dial different numbers to reach the right emergency response agency. Wireless carriers can program their switches to route a 9-1-1 call to any single emergency services number a state tells us to call, but too often carriers are prevented from delivering that call. In suburban Chicago, for instance, because of liability concerns, PSAPs are refusing to process wireless 9-1-1 calls, requiring carriers to send E 9-1-1 calls to a third party that answers the call and then routes it to the appropriate safety agency.

The *Saint Louis Post Dispatch* recently reported polling that showed that 90 percent of those polled said they rely on 9-1-1 to connect them to help in an emergency. However, more than half

of Missourians surveyed did not know that "Star 55" is the emergency number to call on your wireless phone, not 9-1-1. As stated by Representative Pat Danner (MO-6th) in a December 8, 1997 editorial in the Kansas City Star, "If a motorist were to travel from Kansas City to Washington D.C. on Interstate 70, the traveler would have to know to dial *55 in Missouri, *999 in Illinois, 9-1-1 in Indiana, *DUI in Ohio, 9-1-1 in Pennsylvania and *77 in Maryland. Further, in the United States as a whole, there are as many as 25 different cellular assistance numbers. The system should not be so convoluted."

Congressional action to designate 9-1-1 as the universal wireline and wireless emergency number in the U.S. would provide protection to all Americans against senseless tragedies. A uniform national primary emergency telephone number is increasingly important because so many Americans use wirelesses telephones to report emergencies, and increasingly these same Americans are using their wireless phones outside of their local service area (in areas where they are less likely to know the local primary emergency number if that number is not 9-1-1).

Implementation of Statewide Plans

S. 800 encourages statewide coordination of the efforts of local public safety, fire service and law enforcement officials. The emergency communications needs of the United States are currently served by 5,000 Public Safety Answering Points (PSAPs). These PSAPs are generally housed within local government organizations, such as the local police or fire department. Most PSAPs are autonomous units from others in their state. Some states have adopted uniform statewide enhanced 9-1-1 implementation plans, and designated a single official in charge of 9-1-1 for the

entire state in order to have better emergency communications services. Other states separate wireless calls from the 9-1-1 structure, sending 9-1-1 calls to a state police office, even if it is located miles away from the emergency. Comprehensive and coordinated state plans are needed so that calls get routed to the appropriate place in a timely manner.

A significant barrier to implementing location and other wireless safety advancements expeditiously is that public safety centers and PSAPs in many states are coordinated by a variety of local, county, and state government and regulatory authorities. This creates a difficult environment for private sector carriers to readily implement safety technology improvements when they must work out individual technology and funding arrangements on a county by county, or worse yet, a city-by- city basis.

A wireless carrier in Virginia is a case study into why statewide plans are needed. Triton PCS, Inc. has been licensed by the FCC to provide wireless communications (PCS) service throughout the Commonwealth of Virginia (other than Northern Virginia). Outside of Northern Virginia, the State Police receive most wireless 9-1-1 calls. If the call is not one for which the State Police is the appropriate public safety agency, the call is routed to the local PSAP. In its attempt to establish service in Virginia, Triton telephoned and wrote to the State Police, requesting the State Police provide Triton the applicable State Police 9-1-1 routing numbers. On each occasion, Triton was informed that the State Police would not accept 9-1-1 calls from new wireless providers in Virginia, and that Triton should contact each PSAP in Virginia for its routing information.

For months Triton contacted literally dozens of PSAPs in Virginia. PSAP Administrators repeatedly told Triton that wireless 9-1-1 calls in Virginia are routed to the State Police. In light of the contrary information, Triton subsequently sent faxes, and then certified letters to sixty-six PSAPs, requesting their respective 9-1-1 routing information. Many of the written responses repeat that the State Police handle wireless 9-1-1 calls in Virginia and should be contacted instead of the PSAPs. As an item of interest to Chairman Bliley in the House, this issue was recently resolved but clearly indicates statewide planning and cooperation needs to be encouraged.

The legislation also clearly tells the FCC to encourage Governors to bring together all the parties which can contribute to solutions, not just PSAPs and the wireless industry: from emergency medical leaders, to law enforcement and fire officials, to transportation officials, to organizations like AAA. In a very real sense, our members and the PSAPs together are providing emergency communications that help these groups deliver emergency services to the public. We are serving their needs, so we are committed to having them at the table as state wireless safety and E9-1-1 deployment plans are developed and implemented.

New Technology Should Receive Similar Protection

The wireless industry is working with the Federal Communications Commission (FCC) in implementing solutions required to meet the FCC's Report and Order regarding enhanced (E9-1-1) services.[2] The lack of limitations on liability for wireless carriers -- on a par with that provided

[2] By April 1, 1998, wireless carriers must have initiated actions necessary to relay a caller's location (Automatic Number Identification) and the location of the cell site and sector receiving an E9-1-1 call. Phase II calls for carriers, no later than October 1, 2001, to have the capability to identify the latitude and longitude of the mobile

to wireline carriers -- is one of the most significant barriers to the implementation of wireless 9-1-1 and enhanced 9-1-1 services today. Wireless carriers are committed to providing the best possible service, but because of the nature of wireless technology there will be an occasional gap in coverage, interference from buildings or trees, discharged batteries, or other technical problems. These technological limitations -- which are beyond the control of wireless carriers -- subject the carriers to unacceptable risk of lawsuits for failed emergency calls. Likewise, the parity which is appropriate between wireline and wireless carriers ought to also apply to the entity receiving the call, the PSAP. There is no reason why a lower liability standard should apply to a PSAP because a 9-1-1 call came via wireless rather than wireline.

CTIA strongly supports the inclusion of liability provisions in S. 800. These provisions will promote the deployment of wireless E9-1-1 services by removing a cloud of uncertainty that currently hangs over wireless carriers when they offer those services. These provisions are a reasonable accommodation of the needs of wireless carriers and the rights of the states to determine liability issues. Significantly, this bill does not preempt states. Rather, it simply applies a state's policies on wireline liability to wireless carriers.

Landline local exchange carriers historically have enjoyed broad immunity from liability for their role in delivering 9-1-1 calls. In order to ensure that landline carriers provided emergency services to all callers without discrimination -- and to ensure that the costs of providing emergency services were not so great that they would prevent carriers from providing this

---

units making E9-1-1 calls within a radius of 125 meters. Both Phase I and II requirements apply only if the carrier receives a request for such a service from a PSAP capable of receiving and using the service and a mechanism for the recovery of costs relating to the provisions of such services is in place.

publicly beneficial service -- government policy makers determined that landline carriers should be able to limit their liability for damages for calls that did not go through (typically requiring a showing of more than simple negligence). The historical basis for limiting the liability of landline carriers has equal force for wireless carriers providing 9-1-1 service.

If wireless carriers were permitted to decide whether or not to offer E9-1-1 service they could evaluate the risks of providing the service -- including their exposure to liability and their ability to limit these risks -- before providing that service. But because Federal law requires wireless carriers to provide E9-1-1 service, carriers are necessarily exposed to greater risk than they would willingly assume in the normal course of business. Wireless carriers' exemption from tariff filing requirements precludes them from using tariffs to protect themselves. Wireless carriers also cannot use contract provisions to protect themselves from liability because a recent FCC rule requires them to transmit all wireless 9-1-1 calls, even those from callers with whom the carrier does not have any contractual relationship.

Some opponents of liability limitations for wireless carriers argue that wireline carriers alone are "entitled" to these limitations because they are subject to continued rate and entry regulation while wireless carriers are not. Their arguments are unavailing for several reasons. First, in deregulating wireless carriers in 1993, Congress did not exempt them from public utility obligations. To the contrary, wireless carriers are by law "common carriers" with all of the accompanying obligations. More specifically, while free from tariff requirements, wireless carriers remain subject to Federal statutory obligations to charge just, reasonable, and nondiscriminatory

rates. Second, the deregulation accorded wireless carriers in 1993 was in no way tied to the loss of protections against liability generally available to other common carriers. Finally, under current law wireless carriers must contribute to Federal and State universal service funds, a hallmark of "public utility" status.

Providing wireless carriers with equivalent liability protection is a simple matter of addressing two public policy goals: E9-1-1 and local competition. Carriers are being asked to expedite the deployment of wireless E9-1-1 systems. Congress and the FCC want location technologies deployed fast. Having wireless in a worse liability situation than wireline is clearly a disincentive to rapid deployment of these new technologies. Similarly, both Congress and the FCC want wireless to provide local telephone competition. It is harder to do that if we operate under different liability standards.

S. 800 does not preempt state law governing liability. Rather, it ensures that wireless carriers will enjoy the same protection from liability that wireline carriers enjoy today, whether they receive that protection from tariffs, contracts, or State or Federal statutes. S. 800 will provide wireless carriers with the minimum level of protection that they need in order to provide E9-1-1 services to consumers everywhere. I commend you for including this protection in the Wireless Communications and Public Safety Act of 1999.

Technologies that Improve Wireless Emergency Services

The wireless industry is dedicated to improving and enhancing wireless emergency communications to further enhance call completion. The wireless industry supports "automatic

A/B roaming," a solution that would enhance 9-1-1 call completion, but would also support a generic functional requirement that would permit multiple technical solutions to enhancing wireless 9-1-1 call completion.

We also need to implement E9-1-1 so we can get on to a very exciting new technology which combines wireless with the increasing computerization of cars. In very short order we could and should see the deployment of automatic crash notification technology which, at the instant of a car crash, will provide emergency officials with sensor data about the crash allowing them to predict the severity of injuries. We strongly support federal funding of ACN field trials with trauma experts so that future ACN technology can be used to predict the specific types of injuries a victim is likely to have.

We compliment the Department of Transportation on its groundbreaking research in this area, but much more needs to be done.

Coverage: Advancement Towards a Seamless, Ubiquitous System

In enacting the wireless telecommunications provisions of the Omnibus Budget Reconciliation Act of 1993 and the Telecommunications Act of 1996, Congress carefully weighed the national interest in a seamless, ubiquitous and reliable wireless infrastructure and the interest of States and localities in regulating placement of wireless antennas. Congress avoided the extreme of stripping States and localities of any voice in the placement of antennas and the other extreme of empowering States and localities to completely veto expansion of the wireless infrastructure. We

understand that the National League of Cities (NLC) and the National Association of Counties (NACo) support this legislation as written. We think this is a very positive step and will continue to work with these organizations and others to advance public safety.

Today, in both chambers, efforts are underway to destroy this delicate balance. If successful, these efforts will delay the buildout of our nation's telecommunications infrastructure and ultimately denigrate the role of wireless communications in emergency services. I urge this Committee to counter efforts detrimental to the health and welfare of American citizens. Without antennas there will be "dead zones" and as a result emergency calls will fail to go through.

The wireless industry and most States and localities have established good working relationships on antenna siting issues and our industry is working hard to adopt policies that avoid disputes before they occur. The Federal Communications Commission has established a Local and State Government Advisory Committee ("LSGAC") and has facilitated discussions between the LSGAC and CTIA and other trade associations representing the wireless industry. As a result, local and State governments and the wireless industry have adopted guidelines for siting wireless facilities. When there is a dispute, States and localities and the wireless industry have agreed to use an informal dispute resolution process. As a result of this cooperative agreement, CTIA withdrew a petition it had filed with the FCC seeking preemption of local tower siting moratoria. As further evidence of this cooperative effort, CTIA, the American Hiking Society (AHS) and the Appalachian Trail Conference (ATC) have reached a consensus to develop a voluntary early notification and education process when industry proposes locating antenna sites within one mile

from a National Scenic Trail. Enactment of yet another set of Federal mandates on consideration of siting decisions would disrupt these effective relationships.

As Susan Hoyt, immediate past President of the Emergency Nurses Association, said in Congressional testimony last year:

> "Federal, state and local governments have a responsibility to make emergency communications possible by encouraging and allowing the construction of ubiquitous, seamless wireless networks. We are not asking you to pre-empt any local zoning authority. The 1996 Telecommunications Act says that networks should be seamless, and no governmental body can bar wireless communications from its jurisdiction. Wireless carriers need to work with local communities to find locations for antennae to build out their networks, but the local communities cannot say "no" if that will result in a dead zone in the network."

Recently, some have suggested that emergency calls can be handled by alternatives to terrestrial based systems such as satellite networks handling all emergency calls thereby removing the need for antennas. This is simply not an option - nor will it be anytime soon. The President of Iridium, one of the satellite communication industry's providers, explained why this is a fallacious argument by noting that on the East Coast of the United States, Iridium can only handle 750 calls simultaneously. 9-1-1 calls alone would overwhelm the Iridium system and be cost prohibitive. Furthermore, Iridium uses terrestrial systems as its primary routing backup for calls and in fact depends on wireless terrestrial systems.

I realize that federal siting has been removed from the wireless 9-1-1 bill Senators McCain and Burns introduced last year, but I would be remiss if I did not touch upon it and use an example of how federal siting remains a problem. Even with a universal wireless emergency number, liability

protection and statewide plans, all are useless if a call is placed in an area without wireless coverage. Protecting the public's health and safety through the use of our telecommunications infrastructure is not simply a matter of telling everyone to dial 9-1-1. The call must go through. One part of the solution to this problem is to improve on the use of thousands of Federal buildings and other structures, as well as millions of acres of Federal land, to help fill those dead zones.

Neither the President's 1995 Memorandum to Federal agencies urging them to facilitate the placement of wireless antennas on Federal property, nor section 704(c) of the Telecommunications Act of 1996, which directed them to do so, has resulted in a change of attitude on the part of most Federal agencies with respect to this subject. With a few welcome and notable exceptions -- including the Postal Service, General Services Administration, Bureau of Land Management, and the Forest Service -- most Federal agencies continue to ignore this imperative completely, or to erect uneconomic, if not insurmountable, barriers to wireless antenna siting.

After five plus years of debate and discussion, thousands of dollars in time and expenses spent on studies, the National Park Service ruled in March of 1999 to allow a CTIA member to erect two antennas in Rock Creek Park. Two antennas to provide coverage for the carrier's customers as well as provide wireless assistance in the event of an emergency. The seemingly endless battle continues though with the decision in April to disapprove of the telecommunications facilities by the National Capitol Planning Commission (NCPC). If you multiply the Rock Creek Park situation over and over again, you will begin to understand what we face on a regular basis from

the Park Service and other Federal agencies across the country. If together we are to create the seamless end-to-end public safety communications system that we all envision, this kind of bureaucratic obstinacy must cease.

We are pleased, Mr. Chairman, that you and the Members of this Committee and Subcommittee, on a broad and bipartisan basis, have recognized the importance of this safety agenda. CTIA encourages you and the Subcommittee to move forward once again to weave the next generation of wireless technology together with the sophisticated medical and emergency response capabilities now in place or under development, in order to create the seamless, ubiquitous, end-to-end communications infrastructure for public health and safety envisioned by S. 800.

Thank you for your consideration of our views.